

A B S T R A C T

An aerodynamic method of making tissue paper comprises the steps of preparing an aerosuspension out of cellulose fibers, forming a layer of fibers on a forming wire, moistening the formed layer of fibers and pressing and drying of said formed layer. The step of moistening the layer of fibers is performed concurrently with the step of pressing, for which purpose the layer of fibers is placed between the profiling and moistening belts. The surface of the profiling belt comprises protruding elements, wherein a distance between two mutually-adjacent protruding elements doesn't exceed an average length of the fibers. A wire with smoothed nodes of interweaving threads can be used as the profiling belt, while fine-mesh wire can be used as a moistening belt. Selective moistening of fibers only in the areas being pressed eliminates moistening of the entire layer, and drying of the paper web requires significantly less expenditures of time and energy. Shrinkage of the paper web is also minimized because the non-pressed areas of fibrous layer don't practically get moistened.

09831516.062501

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 :

D21F 9/00

A3

(11) International Publication Number:

WO 00/36212

(43) International Publication Date:

22 June 2000 (22.06.00)

(21) International Application Number: PCT/US99/24732

(22) International Filing Date: 25 October 1999 (25.10.99)

(30) Priority Data:

98122569

15 December 1998 (15.12.98) RU

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(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

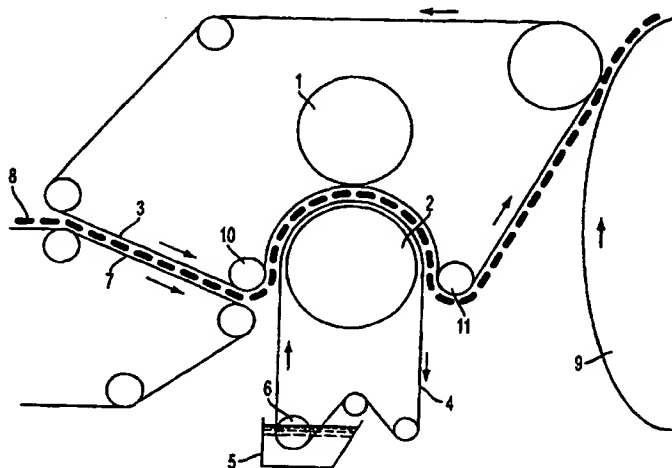
Published

With international search report.

(88) Date of publication of the international search report:

23 November 2000 (23.11.00)

(54) Title: AERODYNAMIC METHOD FOR MAKING TISSUE PAPER



(57) Abstract

An aerodynamic method of making tissue paper comprises the steps of preparing an aerosuspension out of cellulose fibers, forming a layer of fibers (8) on a forming wire (7), moistening the formed layer of fibers and pressing and drying of said formed layer. The step of moistening the layer of fibers is performed concurrently with the step of pressing, for which purpose the layer of fibers is placed between the two mutually-adjacent protruding elements doesn't exceed an average length of the fibers. A wire with smoothed nodes (14) of interweaving threads can be used as the profiling belt, while fine-mesh wire can be used as a moistening belt. Selective moistening of fibers only in the areas being pressed eliminates moistening of the entire layer, and drying of the paper web requires significantly less expenditures of time and energy. Shrinkage of the paper web is also minimized because the non-pressed areas of fibrous layer don't practically get moistened.